



IMPACT OF STRATEGIC INTERVENTION ON THE LEARNERS: A STUDY FOR OVERCOMING DYSLEXIA AND DYSGRAPHIA

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ABSTRACT

Education for All, DPEP, Sarva Siksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RAMSA) have been launched by the Government of India to bring all category of children to the fold of education within the age group of 6-14 (Elementary). Here, all children mean SC, ST, girls, differently able children and marginalized children irrespective of caste, creed and gender. The National Policy of Education (NPE) 1986, Programme of Action (POA) 1992, in its document laid emphasis on the education of the children of focused group who need to be brought to the mainstream. A diagnostic test was conducted to the children of a school studying in class VII. The researcher identified language problems of some children and discussed with the Headmaster and the language teacher to provide some remedial activities for them. Accordingly it was decided to take up a study on "Improving the reading and writing skills of the students with learning disabilities of class VII in English". The objectives of the study were (i) to identify the problems of the learners in respect of reading and writing. (ii) to extend strategic intervention using a specially designed package to help the learners to overcome the problems. (iii) To study the effects of the intervention on developing reading and writing skills of the students. The researcher selected 20 children from upper primary school of class VII having both reading and writing problems through diagnostic test. After identification of those children, the researcher felt the need of developing a package and planned for Individual Education Programme (IEP) adopting cooperative learning strategies like 'Think, Pair and Share' (TPS), 'Pair, Think and Share' (PTS) and 'Group Think and Share' (GTS). Scheduled activities like listen to yourself, guess and tell exercise, recite a rhyme, pay attention to intonation and stress, mark the silent letters during pronunciation, mark the words with similar sound etc. Students were supplied with worksheets to do the written assignments which were corrected by peers in presence of the subject teacher. The teacher made necessary corrections. The activities continued for one month and assessment was done in respect of reading problems (dyslexia) and writing problems (dysgraphia). It was found that in case of pronunciation rate of elimination was 25%. So far as oral reading and reading comprehension are concerned the mean score at the pre-test was 8.0 and at the post-test, it was 10.0. So far as spelling is concerned, the mean score at the pre-test was 8.0 and at the post-test it was 18.0 which were found significant at 0.01 levels. Thus the intervention proved effective.

KEYWORDS: Dyslexia, Dysgraphia, cooperative learning, classroom management.

INTRODUCTION:

Education is the basic need and fundamental right of every child. National level programmes like OBB, DPEP and SSA have been launched for Universalization of Elementary Education and RMSA for Universalisation of Secondary Education. But the focus of the educational programmes is to provide quality education to the students through satisfactory inputs to realize learning achievement by all children. Here "all" includes 6-14 years of age group belonging to SC/ST, girls, differently able children and marginalized children. The sole purpose of the National Programmes is to mainstream these children in the formal schools running in inclusive setup. It is observed that the learning achievement of some children who are living with learning difficulties are not up to mark for which planning of learning programme need to be particularly designed for those categories of children. After enrollment of the child in the schools, mostly they fall under four categories viz. Dyslexia, Dysgraphia, Dyscalculia and Dyspraxia. Their attendance must be regular in school. In spite of academic interventions the classroom scenario is yet to be changed to enhance the learning achievement of the learners with learning difficulties. RTE Act 2009 has specially focused on the quality education for all children at school level. National Achievement Survey Reports reveal that the achievement of the learners is not up to the mark. For example: Annual Status of Educational Report (ASER) 2014 found that "over 75% of all children in class 3, over 50% in class 5 and over 25% in class 8 could not read text meant for the class 2 level. At the all-India level, the number of children in rural schools in class 2 who could not even recognize letters of the alphabet increased from 13.4% in 2010 to 32.5% in 2014. In the last year of their primary education in class 5, almost 20% of children could only read letters or were not literate even at this level; 14% could read words but not sentences; and 19% could read sentences but not longer texts". In the light of the above report of ASER it is imperative that the classroom scenario of Indian schools needs to be revamped. The researchers in course of their monitoring of the primary schools, got evidences of low performance of the students studying at elementary level. The Right to Education Act, 2009 states that all children should have quality education with satisfactory learning achievement. A class consists of three categories of learners like high achievers, mediocre and low achievers and needs of one category differ from the other. In an inclusive setup, the education of the differently able learners who have their schooling take their education with normal children and their learning needs are different from the normal children. The differently able children constitute Hearing Impaired (HI), Visually Impaired (VI), Cerebral Palsy (CP), Mentally Retarded (MR), Locomotive Impaired (LI) and Learning Disability (LD). Learning Disability (LD) refers to a group of disorders that affect a broad range of academic and functional skills including the ability to speak, listen, write, spell, reason and organize information. Children with learning disability are different from other categories in respect of their educational needs. "Learning difficulties are not prescription for failure with the right

kinds of assistance, guidance and support. There are no limits to what individuals with LD can achieve".

Characteristics of Learning Disability:

- Persistent academic difficulties in one or more areas.
- Discrepancy between the student potential and actual performance.
- Difficulties in both reading and writing language.
- Poor language performance in the areas of handwriting, spelling, expression etc.
- Difficulties in oral expression, listening and comprehension, math performance, calculation reasoning, memory and meta-cognition.

Learning Disability (LD) are mainly of three types namely Dyslexia, Dysgraphia and Dyscalculia. This study is limited to Dyslexia and Dysgraphia.

(a) Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with word recognition, pronunciation and reading comprehension. These difficulties typically result from a deficit in the phonological component of language that hinders cognitive abilities.

Characteristics of students with Dyslexia:

- The first and the foremost characteristic of a student with reading problems is that s/he is not able to read.
- He is prone to faulty pronunciation.
- S/he is poor in reading and comprehension.
- A dyslexic student does not read willingly and fluently.
- A student with a reading problem cannot use written material to improve his learning.

(b) Dysgraphia relates to students facing difficulties with spelling, poor handwriting and trouble putting thoughts on paper.

Characteristics of Dysgraphia:

A student with writing disorders, i.e. dysgraphia:

- Has problems explaining the sequence of activities. For example, what is happening in the story picture?
- Has problems in dealing with questions like, "How are they alike" or "How do they differ." (i.e. compare and contrast)
- Cannot understand through writing.
- Dislikes/avoids written work in the classroom.
- Intermingles/mixes letters frequently.
- Shows inadequate sentence structures in written work.
- Has no idea of paragraph formation.
- Has untidy written work.

RATIONALE OF THE STUDY:

During monitoring of the classroom process the investigator observed that some students were deficient in reading and writing. When the reasons were sought the teachers stated that those children have comprehension, handwriting and spelling problems. So the researcher decided to conduct a study with the following objectives:

- To identify the children having reading and writing problems.
- To plan for Individual Education Programme (IEP) through self-developed learning materials.
- To study the effects of the intervention on developing reading and writing skills of the students.

HYPOTHESIS:

The intervention will bring about considerable improvement in the reading and writing skills of the students.

Delimitation of the study:

The study was delimited to pronunciation, spelling, reading and reading comprehension in second language (English) of class VII students.

METHODOLOGY:

(a) Sample:

20 children of class VII were identified through a diagnostic test and thus purposive sampling technique was adopted for the study.

(b) Tools:

The following tools were used for the study:

- Pre-test and post-test (Oral and written),
- Observation schedule,
- Checklist
- Work sheets
- Package on Learning Disability.

(c) Design of the Study:

It was a single group pre-test and post-test design with the strategy "test-teach-test".

(d) Procedure of the Study:

- Administering a Diagnostic Test:** The researcher administered a diagnostic test to the children of class VII to know their real problems based on reading and writing. Problems were found in respect of total 20 students pertaining to pronunciation. Out of 20, reading comprehension problems were identified in case of 10 students. 12 students were identified poor in spelling skill.
- Classroom Management Techniques:** Cooperative learning, peer assisted learning, ability grouping were some of the strategies followed during classroom transaction. Under co-operative learning strategies 'Think-pair-share' (TPS), 'Pair-think-share' (PTS) and 'Group-think-share' (GTS) were followed for better interaction among students. Drill card method, joint oral reading method was followed. Under drill card method, a flash card containing one letter only was shown to the students. The teacher pronounced the sound represented by a letter. Subsequently the students followed pronouncing all the words corresponding to the sounds of the letters. In case of reading aloud and recitation of rhymes joint oral method was followed. In this way the intervention was extended for one month after which evaluation was done in order to know the progress and elimination of learning problems.

(e) Activities conducted during Intervention:

- Activity 1: Pronunciation and Writing:** So far as reading is concerned words having common sounds like ground, found, round, bound and rough, tough, cough were grouped separately to help the learners to pronounce the words with ou and gh. Some silent letters in a word like wa(l)k, ta(l)k, cha(l)k, (k)nife, com(b), ca(l)m, pa(l)m, shou(l)d, cou(l)d, wou(l)d etc. were grouped together so that the learner can easily catch the specific words during pronunciation and writing. In all the above word letter "l" is silent.
- Activity 2: Spelling:** So far as writing is concerned rolled handwriting papers were supplied to the students with a model sentence indicating the words to be placed in the upper part, middle part and the bottom part in a four lined rolling paper. For spelling activities spelling games, exchange of cards with correction, "spelling bees", arrange the jumbled letters, fill in the missing letters were some of the strategies to develop spelling skills in the learner.
- Activity 3: Card game (Pair work):** Students can learn pronunciation and spelling both through this game. Writing a number of words in group such as sit, bit, fit, hit, pit. Distribute the cards in small groups. First demonstrate how to use the cards. The teacher pronounces the word 'sit' and the students pronounce in chorus. Then the students sit in pairs. One shows a word, his partner pick up other words having same pronunciation and spelling with focus on the "vowel" written in the middle of the word. Another word 'beat' can be grouped to similar words like seat, heat, meat etc. the teacher first pronounce the words and indicates how pronunciation of 'sit' is different from the word 'seat'. Then the students show the word card to his partner and his partner pronounces it.
- Activity 4: Rhyming game (group work):** At first the teacher sings the rhyme and the students follow him in chorus. They are asked to clap when two word rhyme with each other.

"This is my kite

This is my kite

I fly it left

I fly it right

Enjoy the sight

This is my kite

It has two colors

White and brown

Sometimes it goes up

Sometimes down".

The students are asked to write the rhyming pairs with correct spelling. The underlined words are corresponding rhyming words.

- Activity 5:** The purpose of the multiple activities is to develop the vocabulary, spelling skill and pronunciation. Choose the words from the bracket to fill in the blanks.

(crowd, goggle, swarn, bauquet, bucket, shoal,)

A group of bees is called-----

A group of fish is called-----

A group of flowers is called-----

A group of lions is called-----

A group of people is called-----

A group of geese is called-----

- Activity 6:** Pronunciation drill is to overcome Articulation problem. A package containing pronunciation, spelling and vocabulary was used in the class during intervention. After three weeks of treatment based on individualized instruction, the students were administered a post-test.

Table 1: Performance of the student in pronunciation

Selected problematic sounds	N	Pronounced well	%
Pair of vowels making new sound ai (train, paint) ea (leaf, dream) ee (sheep, been) oo (look, good) ou (ground, out)	22	11	50%

Vowel changed by a consonant ar (car, park) er (her, verse) ir (bird, shirt) or (short, or) ur (turn, purple) ow (town, show, low)	22	4	25%
Parts of consonants making new sound th (unvoiced) three, thanks th (voiced) this, mother sh (she, short) ch (which, chicken) ph (phone, elephant) gh (laugh, enough, high, although)	22	4	25%

Table 2: Reading comprehension

Test	N	Mean	S.D	't' value
Pre-test	10	8.0	2.2	
Post-test	10	10.0	2.4	1.94

*Significant at 0.01 level

The comprehension questions were oral. Questions of 5 W's – what, who, where, when, why, how and then the students were asked to write the answers in their note books. At first the topic was divided into SGPs then oral discussion was done. The students were asked to guess and talk using the clues provided to them. Peer correction was done then and there. Individualized instruction was prevalent to facilitate individuals' learning.

Table 3: Spelling

Test	N	Mean	S.D	't' value
Pre-test	12	8.0	2.6	
Post-test	12	18.0	3.2	7.66

*Significant at 0.01 level

Stress was given on recognizing minimal parts like shame, cattle, kennel and pronounce the words in pairs. It was observed that the students who could pronounce the two words wrongly learnt the correct pronunciation in the group and teacher's personal effort through individualized instruction helped the learners to overcome their problems pertaining to spelling, speaking game conducted in group proved an additional benefit for the students.

RESULTS AND DISCUSSION:

The assessment on pronunciation was purely oral in nature and it was assessed using a check-list. It revealed that the difficulties of the students were eliminated to the extent of 25%. It was because some difficult sounds created problem for them to follow. Most of the students didn't know how to pronounce a word with s and z. Besides silent letters were wrongly pronounced by them in a word which was corrected later on. In case of reading aloud they didn't use pause and intonation before but as a result of intervention they knew where to use pause and intonation. So far as spelling is concerned there was substantial improvement due to the treatment based on techniques like spelling bee, exchange of word cards, arrange the jumbled letters. So in respect of spelling at the pre-test stage the mean score was 8.0 but at the post-test stage it was raised to 18 and it was found significant at 0.01 levels. So far as reading comprehension is taken into account the pre-test score was 8.0 and post-test score was found 10 and the improvement was found significant at 0.01 levels as a result of intervention using the package. Thus the intervention proved effective. (Refer to the tables on page to page with the titles and statistics)

FINDINGS:

1. Pronunciation skill is concerned with the critical sounds which could not be mastered by majority of the students. Only 25% out of the total students were able to pronounce the words because of rigorous pronunciation drill. Grouping words having similar sound and peculiar sounds were identified by them and which helped them in improving their pronunciation skill.
2. As regards reading comprehension it was up to marks so far as assessing answers to WH questions of objective type, global, local, inferential and evaluative. Locating specific information in the text through scanning facilitated their comprehension ability.
3. So far as spelling is concerned there was a sustainable improvement because of the spelling techniques like arrange the jumbled letters, fill in the missing letters, spelling bee, word within a word, delete the first letter of a word and get a new word, doubling of letter were some of the activities which helped in enhancing their spelling ability.

CONCLUSION:

Bringing about the changes in the reading and writing skill of the children with

learning disability requires adequate time. Constant monitoring of classroom process is also required. The teacher dealing with the children having reading and writing disorders should be careful. Co-operative learning strategies and peer assessment learning should be strengthened while dealing with those children. Relevant materials and worksheets are also required to acquaint the students with various techniques that will help them to learn through self practice and peer learning.

REFERENCES:

- I. Mark, H. (2008) English Pronunciation in Use. A self-study and classroom use. Cambridge University Press.
- II. Julka, A (2007). Meeting special needs of the differently able children in school. NCERT, New Delhi.
- III. Senapati, S and Mishra, G (2002), Case study of a child with learning disability. Pages 7 to 11. DEP-SSA, IGNOU, MHRD, Govt. of India Project.
- IV. Srinivasan, T, Ret al. (2007). Education of the children with special needs. Distance Education Programme, SSA. DEP-SSA, IGNOU.
- V. Browsing internet.